Miniature Beeping Circuit Prank

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🔧 TOOLS:

- Dremel tool (optional) (1)
- Soldering iron (1)

⚙ PARTS:
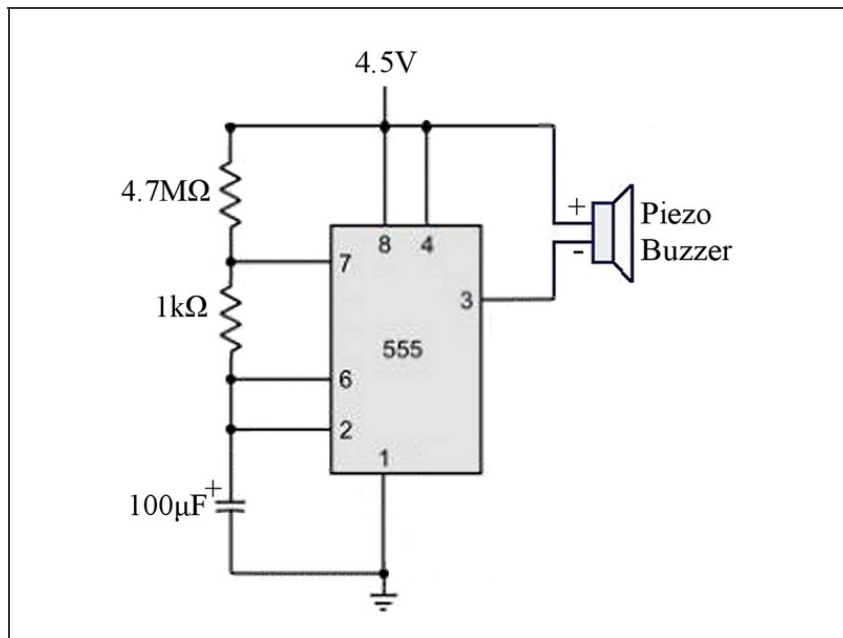
- Printed Circuit Board (RadioShack #276-159) (1)
- 555 Timer IC (RadioShack #276-1723) (1)
- 3-16V Piezo Buzzer (RadioShack #273-074) (1)
- 100 F Capacitor (10V or higher) (1)
- 1kΩ Resistor (1)
- 4.7MΩ Resistor (1)
- Button cell Batteries (3)
  I used LR932 cells but other sizes will work
- Jumper Wire Pack (1)
- Large Paperclip (1)

SUMMARY

Here is a video of the build.

Step 1 — Circuit Design

- The circuit is a basic 555 timer circuit in astable mode. In this configuration the IC sends a brief pulse to the buzzer every few minutes. The values of the resistors and the capacitor determine how often the buzzer will sound and how long each pulse will be. With the values that I used, it beeps about every 6-7 minutes. (If the capacitor is completely discharged, the first beep may take up to twice as long.)

- Increasing the value of either the capacitor or the resistor between pins 7 and 8 will increase the amount of time between beeps. Increasing the value of the resistor between pins 6 and 7 will increase the length of each beep. Decreasing these values will have the opposite effect.

Step 2 — Make the battery connectors.
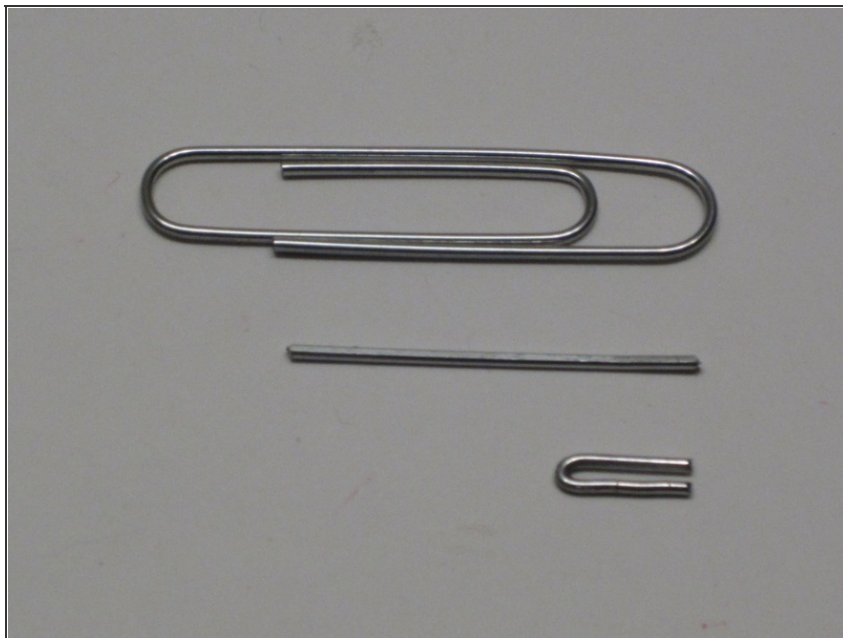
- The only parts that you need to make are the battery connector pins. To make these, cut off two pieces of the paper clip that are about an inch long and fold each of them in half. The bent end is where they will contact with the battery. The cut ends will be soldered to the board.

Step 3 — Solder the circuit to the board
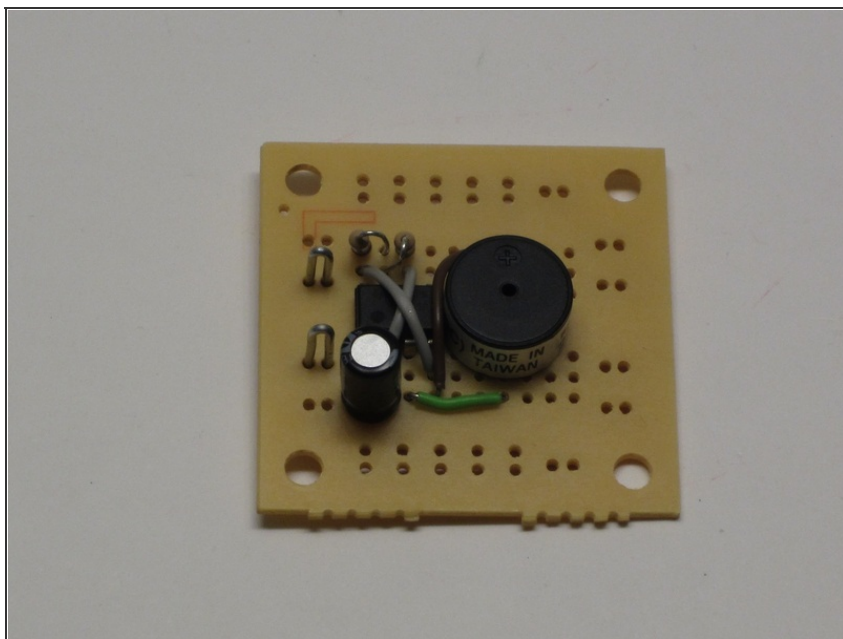
- Then solder all the components onto the board. If you are using the same PCB, you can just copy my layout. If not, just make sure to follow the schematic on Step 1 and check all the pin connections. When soldering the battery connector pins, try to align them so that they are leaning slightly towards each other. This will help make a tight connection with the batteries.

Step 4 — Trim the Circuit Board
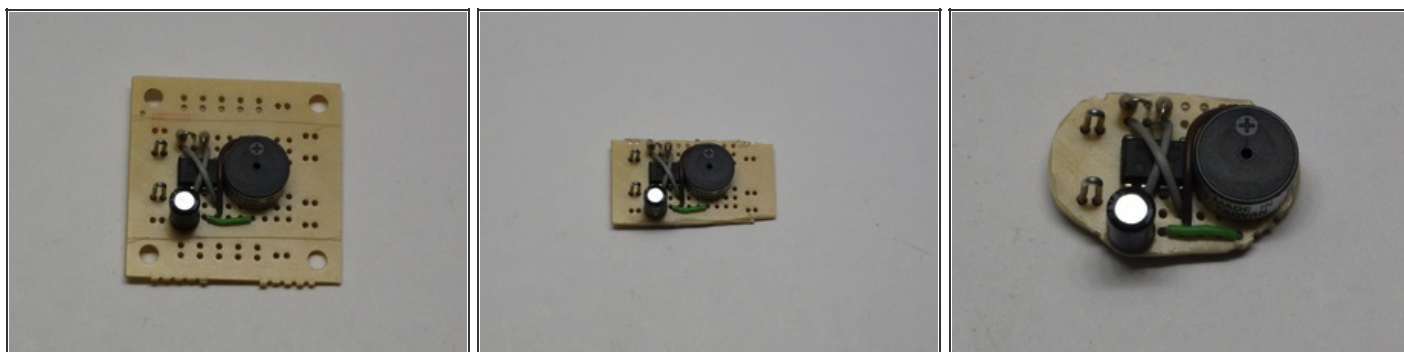
- After soldering everything together, I trimmed off the unused part off the circuit board to make it easier to hide. I used wire cutters to remove the large chunks and a Dremel to trim up to the edge of the circuit board. In hindsight, it would probably be a lot easier to cut the board to the needed dimensions before soldering all the parts onto the board. So if you know where all your parts will be, I recommend trying that.

Step 5 — Finished Circuit

- Then just insert the batteries and your annoying beeping prank is ready. Now all you have to do is find a good hiding spot. You can put it inside someone's computer, tape it to the inside of a drawer, or stick it behind a piece of furniture. Use your imagination. The batteries should last from several hours to several days depending on the size of the battery that you used. But your victim will probably find it before the battery dies depending on how determined/obsessive they are. Be creative and have fun.

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